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# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

December 3, 2009

Martin White  
CMC Rock LLC  
71 East Wadsworth Park Drive  
Draper, Utah 84020

Subject: First Review of Notice of Intention to Commence Large Mining Operations, CMC Rock LLC, Point West Mine, M/035/0042, Salt Lake County, Utah

Dear Mr. White:

The Division of Oil, Gas and Mining has completed a review of your Notice of Intention to Commence Large Mining Operations for the Point West Mine, which was received June 30, 2009. The attached comments will need to be adequately addressed before tentative approval may be granted.

The comments are listed under the applicable Minerals Rule heading; please format your response in a similar fashion. Please address only those items requested in the attached technical review by sending replacement pages of the original mining notice using redline and strikeout text, so we can see what changes have been made. After the notice is determined technically complete and we are prepared to issue final approval, we will ask that you provide two clean copies of the complete and corrected plan. Upon final approval, we will return one copy stamped "approved" for your records.

The Division will suspend further review of the Notice of Intention until your response to this letter is received. If you have any questions in this regard please contact me at 801-538-5261 or Leslie Heppler at 801-538-5257. Thank you for your cooperation in completing this permitting action.

Sincerely,

Paul B. Baker  
Minerals Program Manager

PBB:lah:vs

Attachment: Review

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**FIRST REVIEW OF NOTICE OF INTENTION  
TO COMMENCE LARGE MINING OPERATIONS**

**CMC Rock LLC  
Point West Mine**

**M/035/0042  
December 2, 2009**

**General Comments:**

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
1	General	Submittal should be formatted to easily incorporate additional revisions and amendments.	lah	
2	General	Table of Contents – include map numbers in the table of contents and locations in the NOI	lah	
3	General	Table of Contents - Bonded Areas map is not included in the table of contents; List map and add a location map in the NOI	lah	

**R647-4-104 - Operator's, Surface and Mineral Ownership**

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
4	Page 4 Map	Map does not indicate site location. Site location should be indicated by the boundaries shown on cover sheet	lah	
5	Page 5 Table ?	Land ownership table needs to refer to land ownership map. Please also include the mineral owners.	lah	
6	Page 5	The land ownership table needs to include the telephone numbers of the owners.	lah	
	Page 6 Paragraph 1	The text says a copy of the letter sent to the land owners is included in one of the appendices. Please make it clear that the plan does not include copies of the actual letters, i.e. that the letter in the plan has the wording sent in all the letters. Please also reference the specific appendix where the copy is located (Appendix A)	lah & pbb	
8	Page 6 Para 2	This paragraph apparently refers to the Cover Sheet map. Please make the appropriate clarification. The Division prefers that the Cover Sheet map not include the signature blocks, either blank or with signatures.	lah & pbb	

**R647-4-105 - Maps, Drawings & Photographs**

**General Map Comments**

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
9	Sheet 1 of 11	Submittal should be formatted to easily incorporate additional revisions and amendments. By labeling the maps sheet x of 11, every time a new map is added, then the entire set will have to be redone. The Division recommends numbering the maps sequentially.	lah	
10	All Maps	Please include a map holder for all large maps to be included in the permit.	lah	

### 105.1 - Topographic base map, boundaries, pre-act disturbance

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
11	Page 7	Rewrite section by rule. Please list the maps as they addresses each rule for 1 through 5, Where a rule does not apply, such as R647-4-105 5, please make a statement like, "No underground mining will be included in this permit, see map 4 through 7 for the surface mine development." Rules not addressed include R647-4-105.3.13, 3.14, 3.15, and 3.17	lah	
12	Sheet 1	Title block indicates "topographic base," but the base map is an airphoto. Correct the title block	lah	
13	Sheet 1	Parcel lines are not correctly aligned on the base map. Correct the alignment	lah	
14	Sheet 1	As shown – some of the haul roads to be improved are outside of the permit area. Haul roads need to be within the permit boundary. (Applies to all maps.)	lah	
15	Sheet 1	Green CMC disturbance area boundary on southern part of the mine site is not a complete enclosed area. Finish drawing the line.	lah	
16	Sheet 1	Black dashed line does not define the entire mine site perimeter boundary.	lah	
17	Sheet 1	Note 3 - Items listed under item 3 need to be discounted if they are not within 500' of the permit area. As written the items are labeled on the map. Rewrite Note 3	lah	
18	Sheet 1	Show ALL existing mine permits and other areas that have been affected by mining operations, including Beef Hollow, T&M Holdings, Developments 1, and any others. Sheet 1 and Bonded Area sheet are to show the same disturbed area.	lah	

### 105.2 - Surface facilities map

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
19	Sheet 2.1	Water tank for Operational Services is shown outside of mine permit boundary.	lah	
20	Omission	Include a diagram with the crushing and screening equipment that will be on site.	lah	
	Sheet 3 of 11	The legend of this map has a symbol called "LARGE MINING PLAN AREA (arbitrarily determined)," but it does not appear this symbol is used on the map. If this symbol is not used, it should be eliminated from the legend. What does it mean that the plan area is "arbitrarily determined"?	pbb	

### 105.3 - Drawings or Cross Sections (slopes, roads, pads, etc.)

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
21	Sheet 4 thru 7	Commit through Note on sheets that slope walls during mining not to exceed *H to 1V	lah	
22	Sheet 4 thru 7	Commit through Note on sheets that final slope not to exceed *H to 1V	lah	
23	Sheet 11	Remove Sheet 11 from the NOI. It is not required by rule and DOGM does NOT comment on royalty payment calculations.	lah	
24	App D Water Map	Show location of the Point West permit.	lah	
25	Geologic Map	Provide map in adequate scale to show detail, include outline of the permit area.	lah	
26	SWPP Figure 2	As shown, the SWPP is committing to provide many expensive sediment basins. Please check the calculations to verify if the drawing of the sediment basin is actually a secondary siltation basin.	TM	

**105.4 - Photographs**

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
27	Appendix B	Please show photograph locations on a map.	lah	

**R647-4-106 - Operation Plan****General Operation Comments**

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
28	Omission	Please organize the section by rule including rule references. List the maps that apply to each rule. If a rule or portion of a rule does not apply, please make a negative to that effect. With rule R647-4-106.2, for example, please state that no deleterious or acid forming materials will be used in the Point West Operation (if this is the case). Rules not fully addressed include R647-4-106.2, 3, 4, 8, and 10	lah	

**106.2 - Type of operations conducted, mining method, processing etc.**

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
29	Page 9 Para 1	As written "Dust Suppression @ Aggregate Processing Operations," nothing is written how haul roads and other dust prone areas will be maintained. Please rewrite	lah	

**106.3 - Estimated acreages disturbed, reclaimed, annually**

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
30	Page 11 Table 1	Table does not include "annual" disturbance. Add estimated annual disturbance and reclamation. Table 1 can be modified in the future to reflect dynamic changes in the Operator's business plan.	lah	

**106.4 - Nature of materials mined, waste and estimated tonnages**

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
31	Page 12 Para 2	It should be noted that of the 89.10 acres disturbed previously, much of the area has been reclaimed. Once an operator reworks an area, they are responsible for reclaiming the new disturbance.	lah	
32	Page 13 para 3	There is no estimate included in the paragraph on tonnage. Add estimated tonnage expected. Written text can be modified in the future to reflect dynamic changes in the Operator's business plan.	lah	
33	Page 13 Para 4	Move the last sentence related to the archaeological investigation to R647-4-109, Impacts. The archaeological study must be considered confidential (even if nothing significant is found).	lah	

**106.5 - Existing soil types, location, amount**

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
34	Page 14, Table 4	Table 4 references Figure 2 of the SWPP for the area locations, but this figure was difficult to find because there are two SWPP tabs. Please consolidate this information.	pbb	

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
35				

#### 106.6 - Plan for protecting & re-depositing soils

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
36	Sheets 2.1 and 2.2 of 11	Please include the soil stockpile locations in the legends of appropriate maps.	pbb	
	Page 14	Comment only (no response required): Please note that although the soils surveys show profiles with certain amounts of soil, there are always localized areas where the depth varies. In the case of the Point West mine, Division representatives have observed several feet of soil in some areas. The plan says all topsoil will be stripped, and the Division expects larger amounts of soil to be salvaged where larger amounts are available.	pbb	

#### 106.7 - Existing vegetation - species and amount

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
37	Page 18	The plan says a botanist (Ron Kass) would be visiting the site in June 2009 to observe the plant species and that his findings would be inserted in Appendix E together with a study of threatened and endangered species. Please include Dr. Kass' report.	pbb	

#### 106.8 - Depth to groundwater, extent of overburden, geology

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
38	Page 19 Para 2	The ground water info in Appendix D is difficult to interpret, as most of the data is from off of the permit site. Focus the answer on the Point West permit. The drill data is in feet, not elevation, and outline the permit area on the map.	lah	
39	Page 19 Para 3	Include more information on the overburden depth. Site inspections there have found that there are localized areas with greater than 10 feet of topsoil.	lah	
40	Page 20 para 2	Geology map is difficult to read. Include a map that focuses on the permit boundary, and not on the entire SL County. Outline the permit area and change the scale.	lah	
41	Page 20 Para 3	The plan says, "...the formation is about 7300 feet thick." Which formation is the statement referring to? As written, the mine will not go below the 4900 foot level.	lah	

#### 106.9 - Location & size of ore, waste, tailings, ponds

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
42	Page 21 Para 1 (typo)	"Hospitability" should probably be "hospitable."	lah	

## **R647-4-109 - Impact Assessment**

### **109.1 - Impacts to surface & groundwater systems**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
43	Page 25 2)	Commit to secondary containment of 110 percent of the volume of the primary storage vessel.	lah	
44	Figure 1 and Figure 2	<p>The plan has a lot of good information about what is going to happen with the surface water flows. The plans lacks hydrological calculations for the secondary desilting basins and the on-stream sediment basins as shown on Figure 2, Best Management Practices. The lack of information has created some confusion with the Division.</p> <p>Figure 1, Existing Condition, supplies peak flows for various points on the drainages but with no reference to the method used to calculate these peakflows. Also, peak flows are used to size culverts and spillways but not ponds, so the purpose for these peak flows is not explained or correlated to the plan. The Division needs the hydrologic calculations for the sizing of the on-stream sediment basins and the secondary desilting basins. The plans for and locations of these structures appear well thought out, but without the designs, it is hard to determine their adequacy. It appears that there are three classes of structures: sediment basins, on-stream sediment basins, and secondary desiltation basin. Perhaps, berms in combination with rock check dams will work for what are labeled as sediment basins; larger rock check dams keyed into the beds and banks of the channels would most likely work for the on-stream sediment basins, and a designed structure with spillway, etc., for the secondary desilting structure, as shown in cross section but labeled as sediment basin.</p> <p>The Division needs a better explanation of what these structures are and the hydrologic sizing designs for the secondary desiltation basins, on-stream sediment basins, and sediment basins.</p>	TM	
45	Figure 3	This figure shows restored stream channels. No hydrologic sizing designs are shown on this figure or in the plan. Please describe how the channels will be restored and sized.	TM	
46	General	Please describe how sediment control will be constructed and phased in and out of the project during both the reclamation and construction phases. The on-stream and secondary desiltation basins are good controls in conjunction with surface roughness of regraded surfaces to control sedimentation during reclamation. Ponds that will remain will need to be adequately sized and have flow through capabilities.	TM	

### **109.2 - Impacts to threatened & endangered wildlife/habitat**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
47	Page 25 Last para	Place the documents from DWR, Natural Heritage and Ron Kass in the appendix and note in the text the location of the documents.	lah	

**109.3 - Impacts on existing soils resources**

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
48	Page 27 Para 1	As written, and as shown on maps 2.1 and 2.2 of 11, there are only a few topsoil storage areas, so it must be assumed the stockpiles are going to be high (with the steep sides as written), which is likely to sterilize the soil. The last sentences note that the topsoil piles will also be stored on the aprons of the operation area. The storage of topsoil in many small storage area is generally more effective and will reduce bonding costs. Please consider revising this section of the plan.	lah	
49	Page 27, Paragraph 2 and Table 10	The text says the topsoil piles will be seeded each fall with native grasses and legumes, but the seed mix does not include any legumes. The Division recommends including yellow sweet clover or a dryland alfalfa at a low rate, about 0.5 pounds PLS/acre.	pbb	
50	Page 28 Para 3	The plan says "all native and pre-existing species will be re-introduced," but many of the species in the area are not desirable. Please modify this statement. Undesirable species should not be re-introduced.	lah	

**109.4 - Slope stability, erosion control, air quality, safety**

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
51	Page 29 Para 3	The Division prefers properly installed rock check dams as opposed to silt fence. Silt fence often has problems with being installed properly and becomes a maintenance problem. If silt fence is used, it should be backed with wire mesh and metal t-posts should be used for supports.	Lah+ TM	
52	Page 29 Para 4	Place the cover documents from DAQ in the in the appendix and note in the text the location of the documents.		

**R647-4-110 - Reclamation Plan****110.2 - Roads, highwalls, slopes, drainages, pits, etc., reclaimed**

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
53	Page 31 Para 2 & 4	As written " <b>all roads...will not be reclaimed</b> " This is not acceptable to DOGM. Each property owner is to request in writing the road that will access his property. The written request is to include a commitment to maintain the road until such time as it is reclaimed. All other roads will be ripped and seeded. Submit the property owners requests; also include a map of the different status of the roads to be left.	lah	

### 110.3 - Description of facilities to be left (post mining use)

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
54	Page 31	<p>The Division recognizes the plan to eventually develop this site for residential use; however, the plan needs to have contingencies for development <i>and</i> to return the site to the premining land use. This is because it would be necessary to return the site to the premining land use if the Division was to conduct reclamation. The Division would <i>not</i> anticipate developing the site for residential or other similar uses if it were to conduct reclamation.</p> <p>This concept is discussed in the third paragraph on page 31, but the plan should clearly state the two alternative postmining uses and the reclamation plans under these options.</p> <p>It can be decided what the actual postmining land use will be and what facilities are appropriate for that use when the site is undergoing final reclamation. For the Division to approve a residential use, the area would need to be properly zoned with approved development plans from the local entity with authority to issue this approval.</p> <p>Some of the proposed facilities are not compatible with returning the site to the premining land use, so the plan should include contingencies for reclaiming these facilities while recognizing that the plan could be modified to show these facilities would remain.</p> <p>It appears the existing grading plan is compatible with both the premining land use and development.</p> <p>Please make the following changes:</p> <ol style="list-style-type: none"> <li>1. In the first sentence of the second paragraph on page 33, include the contingency to reclaim the site to the premining land uses (prior to any mining) of grazing and wildlife habitat.</li> <li>2. The Division is willing to allow existing roads to remain or be re-constructed except those roads which were developed for mining uses. If there are roads that were developed or will be developed to facilitate mining operations and which the land owners desire to have left, the plan needs to include correspondence from these land owners showing that they want the roads left following mining and that they will remain responsible for maintenance. Please include commitments and information to this effect.</li> <li>3. Existing roads that have been widened need to be reclaimed back to approximately the original width. The plan needs to have this commitment.</li> <li>4. Please show on a map, such as 2.1 and 2.2 of 11, those roads that fit the categories discussed above. If all the roads on these maps are to remain (and adequate justification is included in the plan), please make mention of this in the text.</li> <li>5. Sediment basins should be removed unless they are part of the eventual postmining land use.</li> </ol>	pbb	



**110.5 - Revegetation planting program**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
55	Page 34, Table 12	The Division recommends substituting bluebunch wheatgrass for Quick Guard sterile triticale in the seed mix.	pbb	
56		Please include commitments to leave the surface rough, to seed as soon after surface preparation as possible, and to seed in the late fall, generally late October through November.	pbb	

**R647-4-113 - Surety**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
	Appendix Surety & Reclamation	Demolition: Please state the amount of concrete on site and how it will be disposed of. The Mean unit cost for demolition (crew B-8) includes a crane and dump trucks. Check to see if line items for a crane and trucks are needed for this project or if they are "being billed twice." Earthwork: Please provide productivity calculations for the type of earthwork that will take place. The Division can provide productivity calculations upon request. List each piece of equipment that will be used for each reclamation type. For example Location A 980 H CAT front end loader.	whw	